

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-29. (canceled)

30.(currently amended) A substantially purified or isolated nucleic acid or nucleic acid fragment encoding an ~~organic acid biosynthesis enzyme polypeptide selected from the group consisting of a citrate synthase (CS) polypeptide; a CS-like polypeptide; a malate dehydrogenase (MDH) polypeptide; a MDH-like polypeptide; a phosphoenolpyruvate carboxylase (PEPC) polypeptide; and a PEPC-like polypeptide;~~ or a functionally active fragment or variant of such a polypeptide, from a clover (*Trifolium*); ~~medic (Medicago); ryegrass (Lolium) or fescue (Festuca)~~ species.

31.(currently amended) A nucleic acid or nucleic acid fragment according to claim 30 wherein said nucleic acid or nucleic acid fragment is from white clover (*Trifolium repens*) ~~or perennial ryegrass (Lolium perenne).~~

32.(canceled)

33.(currently amended) A nucleic acid or nucleic acid fragment ~~encoding a MDH or MDH-like polypeptide;~~ comprising and including a nucleotide sequence selected from the group consisting of

(a) sequence shown in SEQ ID NOS ~~21, 23 to 29; 30, 32 to 33, 34, 36, 38, 40, 42 to 43, 44, 46, 48 to 110, 111, 113, 115, 117 to 182, 183, 185, 205, 207 to 217, 218, 220 to 251, 252, 254 to 270, 271, 273 to 275, 276, 278 to 287, 288, 290 to 292, 293, 295 to 296, 297, 299 to 301, 302, 304 to 305, 306, and 308;~~

(b) complements of the sequences recited in (a);

(c) sequences antisense to the sequences recited in (a) and (b); (d) functionally active fragments and variants of the sequences recited in (a), (b) and (c); and (e) RNA sequences corresponding to the sequences recited in (a), (b), (c) and (d).

34. (canceled)

35.(currently amended) A construct including a ~~one or more~~ nucleic acids or nucleic acid fragments according to claim 30.

36-39. (canceled)

40.(currently amended) A construct according to claim 35 wherein the ~~one or more~~ nucleic acids or nucleic acid fragments ~~are~~ is operably linked to one or more regulatory elements, such that the ~~one or more~~ nucleic acids or nucleic acid fragments ~~are each~~ is expressed.

41.(previously presented) A construct according to Claim 40, wherein the one or more regulatory elements include a promoter and a terminator, said promoter, nucleic acid or nucleic acid fragment and terminator being operably linked.

42.(previously presented) A plant cell, plant, plant seed or other plant part, including a construct according to claim 35.

43.(previously presented) A plant, plant seed or other plant part derived from a plant cell or plant according to Claim 42.

44.(previously presented) A method of modifying one or more selected from the group consisting of organic acid synthesis; organic acid secretion; nutrient acquisition; aluminium and acid soil tolerance; and nitrogen fixation and nodule function; in a plant, said method including

introducing into said plant an effective amount of a nucleic acid or nucleic acid fragment according to claim 30.

45.(currently amended) A method according to claim 44 wherein said method includes introducing into said plant an effective amounts of a nucleic acids or nucleic acid fragments encoding both (a) a CS polypeptide or CS-like polypeptide and (b) a MDH polypeptide or MDH-like polypeptide comprising a sequence selected from the group consisting of the sequences shown in SEQ ID NOS 205, 218, 252, 271, 276, 288, 293, 297, 302, 306, and 308.

46-48.(canceled)

49.(previously presented) A method according to claim 44 wherein the method is modifying nutrient acquisition and the nutrient is phosphorous.

50.(currently amended) A substantially purified or isolated nucleic acid or nucleic acid fragment wherein the nucleic acid or nucleic acid fragment is including a single nucleotide polymorphism (SNP) from a nucleic acid fragment according to claim 30.

51.(currently amended) A nucleic acid or nucleic acid fragment including an SNP according to Claim 50, wherein said nucleic acid or nucleic acid fragment is from white clover (*Trifolium repens*) ~~or perennial ryegrass (*Lolium perenne*)~~.

52.(currently amended) A substantially purified or isolated polypeptide from a clover (*Trifolium*), ~~medic (*Medicago*)~~, ~~ryegrass (*Lolium*)~~ or ~~fescue (*Festuca*)~~ species; selected from the group consisting of ~~CS and CS-like~~, MDH and MDH-like polypeptides and PEPC and PEPC-like; and functionally active fragments and variants thereof.

53.(currently amended) A polypeptide according to Claim 52, wherein said polypeptide is from white clover (*Trifolium repens*) ~~or perennial ryegrass (*Lolium perenne*)~~.

54.(previously presented) A polypeptide encoded by a nucleic acid or nucleic acid fragment according to claim 30.

55.(canceled)

56.(currently amended) A polypeptide according to Claim 52, wherein said polypeptide comprises ~~is MDH or MDH-like and includes~~ an amino acid sequence selected from the group consisting of sequences shown in SEQ ID NOS ~~22, 31, 35, 37, 39, 41, 45, 47, 112, 114, 116, 184, 186,~~ 206, 219, 253, 272, 277, 289, 294, 297, 303, 307 and 309 and functionally active fragments and variants thereof.

57.(canceled)

58.(new) A construct according to claim 35, wherein the nucleic acid or nucleic acid fragment comprises a sequence selected from the group consisting of the sequences shown in SEQ ID NOS 205, 218, 252, 271, 276, 288, 293, 297, 302, 306, and 308.

59. (new) A plant cell, plant, plant seed or other plant part, comprising a construct including a nucleic acid or nucleic acid fragment according to claim 58.

60. (new) A nucleic acid according to claim 33, comprising Seq. ID No. 271.

61. (new) A construct according to claim 35, comprising Seq. ID No. 271.

62. (new) A construct according to claim 40, comprising Seq. ID No. 271.

63. (new) A plant cell, plant, plant seed or other plant part, comprising a construct according to claim 62.

64. (new) A construct comprising two or more nucleic acids selected from the group consisting of:

- (a) nucleic acids encoding citrate synthase (CS) polypeptide or a CS-like polypeptide;
- (b) nucleic acids encoding a malate dehydrogenase (MDH) polypeptide or a MDH-like polypeptide;

- (c) nucleic acids encoding a phosphoenolpyruvate carboxylase (PEPC) polypeptide or a PEPC-like polypeptide,

wherein the nucleic acids are from a clover (*Trifolium*), medic (*Medicago*), ryegrass (*Lolium*) or fescue (*Festuca*) species.

65. (new) A construct according to claim 64, wherein the construct comprises a nucleic acid encoding an MDH or an MDH-like polypeptide.

66. (new) A construct according to claim 65, wherein the nucleic acid encoding an MDH or MDH-like polypeptide is selected from the group consisting of the sequences shown in SEQ ID NOS 205, 218, 252, 271, 276, 288, 293, 297, 302, 306, and 308.

67. (new) A construct according to claim 65, wherein the construct comprises a nucleic acid encoding a PEPC or a PEPC-like polypeptide.

68. (new) A construct according to claim 67, wherein the nucleic acid encoding an MDH or MDH-like polypeptide is selected from the group consisting of the sequences shown in SEQ ID NOS 205, 218, 252, 271, 276, 288, 293, 297, 302, 306, and 308.

69. (new) A construct according to claim 67, wherein the construct comprises a nucleic acid encoding a CS or a CS-like polypeptide.

70. (new) A construct according to claim 69, wherein the nucleic acid encoding an MDH or MDH-like polypeptide is selected from the group consisting of the sequences shown in SEQ ID NOS 205, 218, 252, 271, 276, 288, 293, 297, 302, 306, and 308.

71. (new) A plant cell, plant, plant seed or other plant part, comprising a construct in accordance with claim 64.